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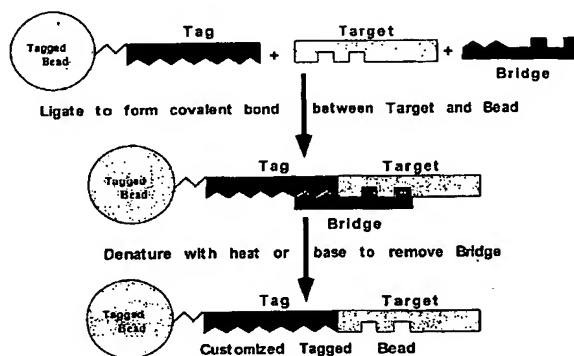
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(54) Title: **A NUCLEIC ACID ANCHORING SYSTEM COMPRISING COVALENT LINKAGE OF AN OLIGONUCLEOTIDE TO A SOLID SUPPORT**



(57) **Abstract:** The anchoring system generally comprises a solid support and a chemical linking moiety useful for ether formation with another chemical moiety on a nucleic acid molecule. The present invention further contemplates methods for anchoring a nucleic acid molecule to a solid support via a covalent linkage. The anchoring system of the present invention is useful inter alia in construction of nucleic acid arrays, to purify nucleic acid molecules and to anchor nucleic acid molecules so that they can be used as templates for in vitro transcription and/or translation experiments and to participate in amplification reactions. The present invention is particularly adaptable for use with microspheres and the preparation of microsphere suspension arrays and optical fiber arrays. The anchoring system permits the generation of an anchored oligonucleotide for use as a universal nucleic acid conjugation substrate for any nucleic acid molecule or population of nucleic acid molecules. The present invention further provides a kit useful for anchoring nucleic acid molecules or comprising nucleic acid molecules already anchored to a solid support.

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